

ABSTRACT

An object of the present invention is to provide a negative electrode which attains excellent Ohmic contact with an n-type gallium nitride-based compound semiconductor layer and which resists deterioration in characteristics which would be caused by heating. Another object of the invention is to provide a gallium nitride-based compound semiconductor light-emitting device having the negative electrode.

The inventive gallium nitride-based compound semiconductor light-emitting device comprises an n-type semiconductor layer of a gallium nitride-based compound semiconductor, a light-emitting layer of a gallium nitride-based compound semiconductor and a p-type semiconductor layer of a gallium nitride-based compound semiconductor formed on a substrate in this order, and has a negative electrode and a positive electrode provided on the n-type semiconductor layer and the p-type semiconductor layer, respectively; wherein the negative electrode comprises a bonding pad layer and a contact metal layer which is in contact with the n-type semiconductor layer, and the contact metal layer is composed of Cr or a Cr alloy and formed through sputtering.